Remarks

Claims 1, 9-13, 21-23,29-32, 36, 38-44 and 46-48 are rejected on the basis of obviousness under 35 USC 103 in view of Gross. In contrast, the remaining claims contain allowable subject matter, subject to being redrafted so as to not depend from rejected claims.

Generally, the Examiner has rejected claims where the similarity operator at issue is (a) a function of the difference between sensor readings, divided by the range for the sensor, but has expressed the allowability of claims where the similarity operator is specified (b) as a mathematical relationship of $s_i = 1 - \frac{\theta_i^{\lambda}}{\rho}$. While Applicants respectfully disagree that a similarity operator in case (a) is obvious in view of Gross, various claims have been rewritten to incorporate the mathematical form of (b).

Claim 1 has been rewritten to incorporate the limitations of claim 2, and claim 2 has been cancelled.

Claim 9 has been rewritten to incorporate the limitations akin to those in claim 2, and Applicants respectfully contend it is now in condition for allowance.

Claim 21 has been rewritten to incorporate the limitations akin to those in claim 2, and Applicants respectfully contend it is now in condition for allowance.

Turning to claim 29, this claim is more specific with regard to the similarity operator than, e.g., claim 1, in that it spells out that the ratio of the absolute difference of the related data points to the expected range is subtracted from one. The limitations of this claim so stated are much more like those of claim 2, which has been earmarked as allowable. Claim 29 provides specificity as to the measure of similarity of vectors and Applicants respectfully contend claim 29 is not obvious in view of Gross. Claim 33 (which has also been earmarked as allowable) shows a mathematically extended form of claim 29, providing for λ and ρ tuning factors.

Claim 36 has been rewritten to incorporate the limitations akin to those in claim 2, and Applicants respectfully contend it is now in condition for allowance. Claim 37 adds the power and constant to the formula of claim 36.

Appln. No. 09/780,561 O.A. dated 3/10/04 Response to O.A. dated 9/10/04

Claim 44 has been rewritten to incorporate the limitations of claim 45, which has been cancelled.

In view of the amendments made, Applicants contend all claims are now in condition for allowance. If the examiner would like to discuss Applicant's invention prior to issuing an action, the Examiner should feel free to contact the undersigned attorney.

Respectfully submitted,

Dated: 9-10-04

Perry J. Hoffman

Registration No. 37,150

MICHAEL BEST & FRIEDRICH LLP 401 North Michigan Avenue, Suite 1900

Chicago, IL 60611 (312) 222-6636

(312) 222-0818 (fax)

Attorney Docket No. 086470-9012

S:\client\086470\9012\C0421049.1